

What is claimed is:

1. A clear, crosslinked, polymeric gel composition comprising the reaction product of a microemulsion containing:

- 5 (a) from 1-70 wt.% of an anhydride functionalized polymer;
(b) from 0.1-40 wt.% of a cross-linking agent;
(c) from 0.01-50% wt.% surfactant;
(d) 0.01-30 wt.% water; and
10 (e) from 10-95 wt.% a hydrophobic liquid, based on the total weight of the polymeric gel composition.

2. The polymeric gel composition of claim 1 wherein the anhydride functionalized polymer is present in an amount from 1-40 wt.%, the cross-linking agent is present in an amount from 0.1-20 wt.%, the surfactant is present in an amount from 0.1-
15 20 wt.%, and the water is present in an amount from 0.1-10 wt.%.

3. The polymeric gel composition of claim 1 wherein the anhydride functionalized polymer is present in an amount from 10-25 wt.%, the cross-linking agent is present in an amount from 0.5-5 wt.%, the surfactant is present in an amount from 0.5-
20 10 wt.%, and the water is present in an amount from 0.1-5 wt.%.

4. The polymeric gel composition of claim 1 wherein the combined proportion of (d) and (e) equals at least 30 wt.%, based on the total weight of the polymeric gel composition.

25

5. The polymeric gel composition of claim 1 wherein the anhydride functionalized polymer is a maleinized polybutadiene polymer, a maleinized polyisoprene polymer, a maleinized polybutadiene/styrene polymer or a mixture thereof.

30 6. The polymeric gel composition of claim 1 wherein the cross-linking agent is water soluble

7. The polymeric gel composition of claim 1 wherein the cross-linking agent is a polyamine compound.

8. The polymeric gel composition of claim 1 wherein the surfactant is an anionic or a nonionic surfactant.

9. The polymeric gel composition of claim 1 wherein the hydrophobic liquid is a perfume.

10. The polymeric gel composition of claim 1 wherein the hydrophobic liquid is an insecticide or an insect repellent.

11. The polymeric gel composition of claim 1 wherein the hydrophobic liquid is N,N-Diethyl-m-toluamide.

12. The polymeric gel composition of claim 1 wherein the microemulsion further comprises a water soluble colorant, a water soluble dye, a water soluble pH color indicator or a water soluble pigment.

13. The polymeric gel composition of claim 1 wherein the microemulsion further comprises a water soluble fragrance or flavor material.

14. A clear, crosslinked, polymeric gel composition comprising the reaction product of a microemulsion containing:

(a) from 1-40 wt.% of an anhydride functionalized polymer selected from maleinized polybutadiene polymers, maleinized polyisoprene polymers, maleinized polybutadiene/styrene polymers or mixtures thereof;

(b) from 0.1-20 wt.% of a polyamine cross-linking agent;

(c) from 0.1-20% wt.% anionic or cationic surfactant;

(d) 0.1-10 wt.% water; and

(e) from 10-95 wt.% a hydrophobic liquid perfume, a hydrophobic liquid insecticide or a hydrophobic liquid insect repellent, based on the total weight of the

polymeric gel composition, with the combined proportion of (d) and (e) equaling at least 30 wt.%, based on the total weight of the polymeric gel composition.

15. The polymeric gel composition of claim 14 wherein the hydrophobic
5 liquid is N,N-Diethyl-m-toluamide.

16. The polymeric gel composition of claim 14 wherein the microemulsion further comprises a water soluble colorant, a water soluble dye, a water soluble pH color indicator, a water soluble pigment, a water soluble fragrance or flavor material.

10

17. A method for making a clear, crosslinked, polymeric gel composition comprising:

forming a microemulsion by combining

(a) from 1-70 wt.% of an anhydride functionalized polymer;

15 (b) from 0.1-40 wt.% of a cross-linking agent;

(c) from 0.01-50% wt.% surfactant;

(d) 0.01-30 wt.% water; and

(e) from 10-95 wt.% a hydrophobic liquid, based on the total weight of the polymeric gel composition;

20 forming a microemulsion from the combined (a)-(e); and then

reacting the microemulsion to form a clear, crosslinked, polymeric gel composition.

18. The method of claim 17 wherein the anhydride functionalized polymer is
25 present in an amount from 1-40 wt.%, the cross-linking agent is present in an amount from 0.1-20 wt.%, the surfactant is present in an amount from 0.1-20 wt.%, and the water is present in an amount from 0.1-10 wt.%.

19. The method of claim 17 wherein the anhydride functionalized polymer is
30 present in an amount from 10-25 wt.%, the cross-linking agent is present in an amount from 0.5-5 wt.%, the surfactant is present in an amount from 0.5-10 wt.%, and the water is present in an amount from 0.1-5 wt.%.

20. The method of claim 17 wherein the combined proportion of (d) and (e) equals at least 30 wt.%, based on the total weight of the polymeric gel composition.

5 21. The method in accordance with claim 17 wherein the microemulsion gels in a mold and further comprising removing the resulting gel composition from the mold.

22. The method in accordance with claim 17 wherein the microemulsion is formed by combining a first premix containing the cross-linking agent and one or more of
10 at least a portion of the hydrophobic liquid, the surfactant, and the water with a second premix containing the anhydride functionalized polymer and one or more of at least a portion of the hydrophobic liquid, the surfactant, and the water.

23. The method in accordance with claim 18 wherein the first premix contains
15 the cross-linking agent, the surfactant, the water and a first portion of the hydrophobic liquid.

24. The method in accordance with claim 18 wherein the second premix contains the anhydride functionalized composition and a second portion of the
20 hydrophobic liquid.

25. The method in accordance with claim 17 wherein the surfactant is an anionic or a nonionic surfactant.

25 26. The method in accordance with claim 17 wherein the hydrophobic liquid is a perfume an insecticide or an insect repellent.

27. The method in accordance with claim 17 wherein the microemulsion further comprises a water soluble colorant, a water soluble dye, or a water soluble
30 pigment.

28. The method of claim 17 wherein the microemulsion further comprises a water soluble fragrance or flavor material.

29. A method for making a clear, crosslinked, polymeric gel composition comprising:

forming a microemulsion containing:

(a) from 1-40 wt.% of an anhydride functionalized polymer selected from maleinized polybutadiene polymers, maleinized polyisoprene polymers, maleinized polybutadiene/styrene polymers or mixtures thereof;

(b) from 0.1-20 wt.% of a polyamine cross-linking agent;

(c) from 0.1-20% wt.% anionic or cationic surfactant;

(d) 0.1-10 wt.% water; and

(e) from 10-95 wt.% a hydrophobic liquid perfume, a hydrophobic liquid insecticide or a hydrophobic liquid insect repellent, based on the total weight of the polymeric gel composition, with the combined proportion of (d) and (e) equaling at least 30 wt.%, based on the total weight of the polymeric gel composition by combining a first premix containing (b) the cross-linking agent and one or more of at least a portion of (c) the surfactant, (d) the water, and (e) the hydrophobic liquid, and with a second premix containing (a) the anhydride functionalized polymer and one or more of at least a portion of the (c) the surfactant, (d) the water, and (e) hydrophobic liquid, and ;

forming a microemulsion from the combined (a)-(e); and then

reacting the microemulsion to form a clear, crosslinked, polymeric gel composition.

30. The method of claim 29 wherein the hydrophobic liquid is N,N-Diethyl-m-toluamide.

31. The method of claim 29 wherein the microemulsion further comprises a water soluble colorant, a water soluble dye, a water soluble pH color indicator, a water soluble pigment, a water soluble fragrance or flavor material.

32. The method in accordance with claim 29 wherein the microemulsion gels in a mold and further comprising removing the resulting gel composition from the mold.

33. The method in accordance with claim 29 wherein the first premix contains
5 the cross-linking agent, the surfactant, the water and a first portion of the hydrophobic liquid.

34. The method in accordance with claim 29 wherein the second premix
contains the anhydride functionalized composition and a second portion of the
10 hydrophobic liquid.

30101973